

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024842**Date Inspected:** 16-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Shi Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 009482

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 14W. The weld designations reviewed are as follows:

1. SEG3020AT - 154,155,179,180,161,162,181,182,169,170,183,184,158,159, 185
2. SEG3020AT - 186,165,166,187,188,173,174,189,190,036,037,119,120,091,092

Description of Incident: During random Quality Assurance visual review of the OBG Segment 14W at fabrication bay 14, this Quality Assurance Inspector (QA) discovered the following issue:

- ZPMC personnel performed weld repair of one (1) Longitudinal Crack, without the prior approval of the Engineer or an approved CWR
- The one (1) Longitudinal Crack measuring approximately 130mm in length, found by ABF personnel as on 06/16/2011
- This weld number is identified as SEG3020D-257.
- The weld is Complete Joint Penetration (CJP) weld, joining Bottom Plate RS Stiffener (RS3510AA) to Floor Beam (FB3343A) at Panel Point 128.3.

# WELDING INSPECTION REPORT

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- This weld is designated as Non Seismic Performance Critical Member (Non SPCM).
  - ZPMC personnel completed weld repair on SEG3020D-257 joint by SMAW welding without prior Engineer approval or utilizing an approved Critical Weld Repair Report (CWR).
  - This OBG Segment 14W is located in OBG Fabrication Shop Bay #14.
- For further information, see the attached pictures.

## Magnetic Particle Testing (MT)

This QA inspector witnessed and performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ABF Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 14W.

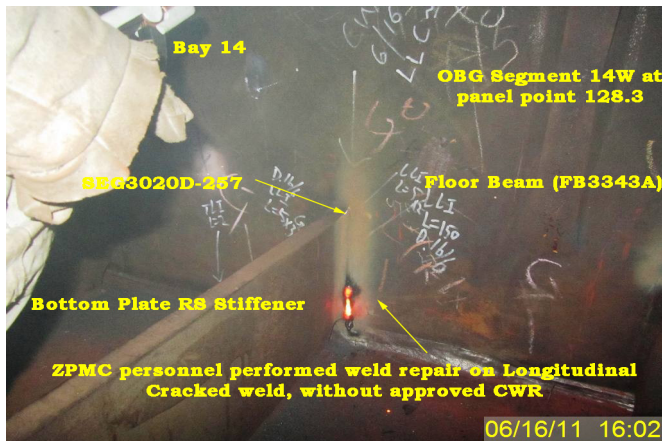
The weld designations reviewed are as follows:

1. SEG3020F-079, 080, 078, 081, 082, 083, 093, 094
2. SEG3020D-253

The weld designations witnessed are as follows:

1. SEG3020F-033, 085, 086, 041, 044, 046, 047, 058, 059
2. SEG3020D-257

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

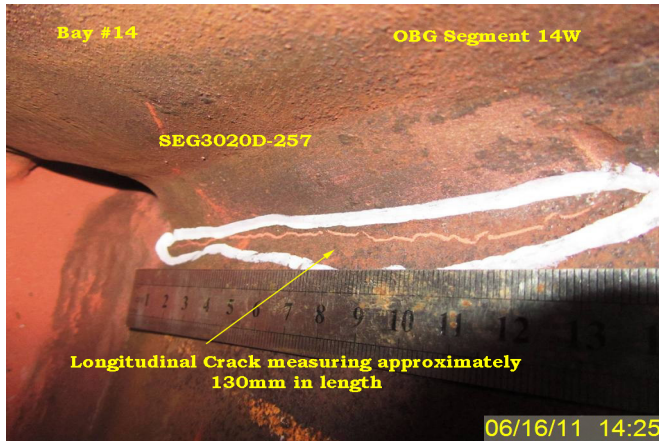


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### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer